

Cachuma Project Water Rights Hearing

October 2003

Panel V

Presenter:

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Issues Related to Oak Trees, Sensitive Species, and
Recreation

URS Corporation



Scope of Testimony

- Three Public Trust Resource Issues:
 - Effect of proposed surcharging on oak trees along Cachuma Lake shoreline
 - Effect of downstream releases for fish on sensitive wildlife species along lower river
 - Effect of proposed surcharging on recreational facilities and uses at Cachuma Lake County Park



Basis of Testimony

- My investigations and studies on these issues for the SWRCB Draft EIR, and Reclamation's FMP EIR/EIS
- Personal knowledge and observations from other studies on the river and at the lake since 1989



Impact of Surcharging on Oak Trees



Lake Elevations

- Current lake elevations:
 - Maximum lake level = 750.75 feet
- Lake levels with 3-foot surcharge
 - Maximum lake level = 753 feet
 - Maximum lake level would occur every three years, on average
 - Average duration of maximum level = 4 months
- Storm surcharge or wave actions will temporarily increase lake elevations



Oak Trees Along Shoreline

- Oak trees are abundant along the shoreline
- Field studies conducted to estimate oak trees in 3-foot inundation zone and in 3-foot wave action zone
- Essentially no trees in the current inundation zone due to losses over the past 50 years
- Only a small percentage dead or in poor health in wave action zone





04/23/2002





05/21/2002







Projected Impact on Oak Trees

- Most trees in the new inundation zone will be lost over time due to periodic inundation
 - Impact may require 20 years or more
 - 339 trees
- Only 25 % of trees in wave action zone expected to be adversely affected
 - 113 trees
- Total number of trees potentially affected:
 - 452 trees (412 coast live oak, 40 valley oak)



Reclamation's Proposed Oak Tree Replacement Program

- Designed to replace oak trees prior to loss
- Long-term program designed to allow improvements in propagation methods as restoration is monitored
- State of the art restoration methods will be used, and long term maintenance
- Designed to ensure 2:1 final oak tree replacement



Planting Scheme

- Primary restoration site is County Park
- Secondary restoration sites: Storke Flats, Santa Ynez Point, Bradbury Dam
- Replacement planting phasing:
 - Plant trees needed to replace $\frac{1}{2}$ of the estimated tree loss (251 trees) immediately
 - Plant trees to replace those observed to be lost over the next 10 years
 - Plant final trees at the end of 10 years







Oak Tree Replacement Ratios

- Designed to ensure 2:1 final oak tree replacement
- Expected mortality rate is 33 %
- Plant at 3:1 ratio to offset expected mortality (1,356 trees)
- Increase the ratio over time if monitoring shows higher mortality rate



Impact of Downstream Releases on Sensitive Wildlife Species



Sensitive Wildlife Species Along the Lower River and its Tributaries

- California red-legged frog
- Southwestern pond turtle
- Two-striped garter snake
- Southwestern willow flycatcher



Effects of Downstream Releases for Fish

- Low flows below the dam will occur for a longer period of time and over a longer portion of the river
- Effect will attenuate with distance, ending near Alisal Bridge
- Low flows will enhance aquatic and riparian habitats which will have beneficial impacts on these species



Effect of Releases on Flycatcher Nesting

- Nesting populations downstream of Buellton and Lompoc
- Nest are occupied May through July; on stems 3 to 15 feet high
- Releases for BNA pass through Buellton area
- Flows could impinge on shrubs with nests
- Significant impact are unlikely because:
 - *Flows are less than 12 inches deep*
 - *Most releases after July*
 - *Population is thriving*



Impact of Surcharging on Recreation



County Park at Cachuma Lake

- Santa Barbara County operates the Park under 50-year contract with Reclamation
- Contract expired in 2003; under 2-year interim contract
- Primary attractions: fishing, camping, nature tours
- 900,000 visitors per year



Impacts of Surcharging

- Higher water level would affect recreational facilities
 - Static water levels
 - With wave action
- Impacts would occur every 3 years, on average, and last for about 4 months
- Critical vs. non-critical facilities
- Park has experienced high water levels during storms



Facilities Affected by 3-Foot Surcharge with Wave Action

- Critical facilities:
 - Drinking water intake and treatment plant
 - Sewer lift stations
- Key non-critical facilities:
 - Boat launch ramp
 - Marina path and floating docks
 - Marina shops







2.27.2001



Mitigating Recreation Impacts

- To avoid impacts, County must relocate facilities
- Funding is greatest challenge
- County has initiated actions to relocate facilities using State, Reclamation, and County funds:
 - Lift stations
 - Water treatment plant
 - Boat launch
- County, COMB, and Reclamation are exploring phased surcharging to allow time for completion of facility relocation



End

Exhibit 245

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